REMARKS

Claims 1-29 are currently pending. Claims 1-4, 15-18, and 24-26 have been amended. Support for the amendments can be found in the Specification at page 9, paragraph 24. No new matter has been added by these amendments.

1. Claim Objections

The Office has objected to claim 15, as lacking antecedent basis for the term "the superabsorbent material."

Initially, applicants note that the term "the superabsorbent material" does not appear in claim 15. As such, applicants submit that there is no basis for this objection. If, however, the Office meant to refer to the phrase "the superabsorbent particles," which does appear in the third and fourth lines of claim 15, applicants note that antecedent basis for the phrase "the superabsorbent particles" can be found in the second line of claim 15, which states: "A feminine napkin comprising an absorbent structure and superabsorbent particles..." As such, applicants assert that this objection should be withdrawn.

2. Rejection of the Claims under 35 U.S.C. §112, first paragraph

Reconsideration is requested of the rejection of claims 1-25 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. In particular, the Office has stated that the term "flake form" in claims 1, 15, and 24 is not sufficiently described, as there is no description that would allow one skilled in the art to make and/or use superabsorbent particles in "flake form." The Office has also stated that the specification supports the term "flake superabsorbents."

Initially, applicants submit that there is support in the specification for superabsorbent particles in flake form. For instance, page 9, ¶24 of the specification describes superabsorbent particles that are in flake form, stating:

> The superabsorbent particles described herein for use in combination with an absorbent product are in flake, ribbon, or sheet-like form, as opposed to conventional superabsorbent particles which are typically spherical-like or chunk-like in form; that is, the superabsorbent particles described herein are substantially flat or planar in form, and do not have nearly equal size in length, width, and thickness in the x, y, and z directions.

Furthermore, the specification describes properties of superabsorbent particles in flake form, such as the desired surface area to volume ratio (see ¶48 and 50), average thickness (see ¶51), and average particle size (see ¶52).

In addition, contrary to the Office's assertion, there is substantial description in the specification of how one skilled in the art could make a superabsorbent particle in flake form. In particular, the specification describes two separate manufacturing approaches for making superabsorbent polymers in flake form; i.e., the monomer-gel extrusion method, and the pre-polymer method. The monomer-gel extrusion method is described in detail in paragraphs 26-33 of the specification, and the pre-polymer method is describe in detail in paragraphs 34-47 of the specification.

MPEP 2163 states that "[t]o satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention." However, "[t]he subject matter of the claim need not be described literally i.e., using the same terms or *in haec verba* in order for the disclosure to satisfy the description requirement." *See* MPEP §2163.02.

Applicants submit that superabsorbent particles in flake form have been adequately described in the specification to convey to one of ordinary skill in the art that the applicants had possession of the claimed invention. As previously discussed, the specification provides specific support for the meaning of superabsorbent particles in "flake form," and provides details on the properties of such particles, as well as how such superabsorbent particles can be produced. As such, applicants submit that the disclosure reasonably conveys to one skilled in the art that the applicants, at the time the application was filed, had possession of the claimed invention.

The Office has stated that the specification supports the term "flake superabsorbents." Although applicants maintain that the specification also thoroughly describes superabsorbent particles in flake form, applicants have amended claims 1, 15, 24 to correspond to the Office's suggested term, "flake superabsorbents." In particular, claims 1, 15, 24 have been amended to change the phrase "the superabsorbent particles are in flake form" to state "the superabsorbent particles are flake superabsorbents..." Applicants note that the term "flake superabsorbents" encompasses not only superabsorbent particles in flake form, but also superabsorbent particles in ribbon or sheet-like form.[1]

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[1] Page 9, ¶24 of the specification states: "Although commonly referred to herein as "flake superabsorbents" it should be understood that this not only refers to flake superabsorbents, but also ribbon and sheet-like superabsorbent materials."

In light of the foregoing, applicants submit that the rejection of claims 1-25 under 35 U.S.C. §112, first paragraph, has been overcome and should be withdrawn.

3. Rejection of the Claims under 35 U.S.C. §112, second paragraph

Reconsideration is requested of the rejection of claims 1-25 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Office has stated that it is unclear if the term "flake form" in claims 1, 15, and 24 is the same as "flake superabsorbents," as defined on page 9, ¶24 of the Specification. The Office has further stated that it is unclear if superabsorbent particles in "flake form" encompass ribbon and/or sheet-like superabsorbents.

As discussed above, claims 1, 15, and 24 have been amended to change the phrase "the superabsorbent particles are in flake form" to state "the superabsorbent particles are flake superabsorbents..." It is clear from the specification that the term "flake superabsorbents" encompasses not only superabsorbents in flake form (i.e., flake superabsorbents), but also ribbon and sheet-like superabsorbent materials. For instance, page 9, ¶24 of the specification states: "Although commonly referred to herein as 'flake superabsorbents' it should be understood that this not only refers to flake superabsorbents, but also ribbon and sheet-like superabsorbent materials."

In light of the foregoing and the amendment to claims 1, 15, and 24, applicants submit the rejection of claims 1-25 under 35 U.S.C. §112, second paragraph should be withdrawn as moot.

4. **Rejection of the Claims under 35 U.S.C. §102(b)**

Reconsideration is requested of the rejection of claims 1, 8-10, and 12-14 under 35 U.S.C. §102(b) as being anticipated by Everett, et al. (U.S. Patent No. 6,437,214).

As amended, claim 1 is directed to an absorbent article for absorbing a complex fluid. The absorbent article comprises an absorbent structure and superabsorbent particles, wherein at least about 5% (by total weight of the superabsorbent particles) of the superabsorbent particles are flake superabsorbents and have an average surface area to volume ratio of at least about 0.05 μm^{-1}.

Everett, et al. disclose an absorbent article comprising an absorbent core having multiple absorbent layers that interact in such a way that absorbed liquid is preferentially located in an appointed, high saturation wicking layer. Absorbed liquid is moved quickly through the absorbent layers by means of capillary action. The intake capability of the absorbent system is maintained by keeping a layer of the absorbent system at low saturation levels through as many insults of the product as possible, and controlling intake performance through control of the composite properties of the absorbent layers.

The Office has stated that Everett, et al. disclose an absorbent article for absorbing a complex fluid comprising an absorbent structure and superabsorbent particles wherein at least about 5% (by total weight of the superabsorbent particles) of the superabsorbent particles are in flake form and have an average surface area to volume ratio of at least about 0.05μm^{-1}.

Initially, applicants respectfully submit that the Office appears to be misinterpreting Everett, et al. Although Everett, et al. do state that the superabsorbent particles used in their absorbent products may have a flake shape, (see Everett, et al., col. 15, lines 37-39), there is no disclosure in Everett, et al. of an absorbent article comprising superabsorbent particles wherein at least about 5% (by total weight of the superabsorbent particles) of the superabsorbent particles are flake superabsorbents. The Office has cited col. 7, lines 49-50 of Everett, et al. in support of its position that Everett, et al. disclose an absorbent article comprising superabsorbent particles wherein at least about 5% (by total weight of the superabsorbent particles) of the superabsorbent particles are flake superabsorbents. However, this passage of Everett, et al. is merely describing the minimum amount of superabsorbent material in the first layer of the absorbent core.[2] There is no mention of flake superabsorbents, much less any disclosure or suggestion that at least about 5% (by total weight of the superabsorbent particles) of these superabsorbent particles are flake superabsorbents.

There are also several other passages in Everett, et al. that provide amounts of superabsorbent particles.[3] However, like the above cited passage, none of these passages are referring to the amount of superabsorbent particles that are flake superabsorbents. Rather, they are simply describing the amount of superabsorbent particles that may be present in various absorbent layers of Everett's absorbent product. There is simply no disclosure or suggestion in Everett, et al. of an absorbent product comprising superabsorbent particles wherein at least about 5% (by total weight of the superabsorbent particles) of the superabsorbent particles are flake superabsorbents.

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[2] "Such first layer desirably includes a minimum of not less than about 5 wt% superabsorbent." Everett, et al., col. 7, ln. 49-50.

[3] *See, e.g.*, Everett, et al., col. 23, ln. 35-38 ("The first layer portion can also contain a minimum of not less than about 20% of superabsorbent material by weight, and desirably contains not less than about 30% superabsorbent."); col. 24, ln. 15-18 (stating that the second layer region portion can include a blend of hydrophilic fibers and superabsorbent gelling material, such that about 20-80 wt% of the composite is composed of superabsorbent particles); and col. 26, ln. 21-23 ("The second layer portion can also contain not less than about 5% of superabsorbent material, by weight, and desirably contains not less than about 15% superabsorbent.").

Furthermore, there is no disclosure in Everett, et al. that the flake shaped superabsorbent particles mentioned therein have an average surface area to volume ratio of at least about 0.05 μm^{-1}, as required by claim 1.

As stated in M.P.E.P. §2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. In the instant case, Everett, et al. fail to disclose an absorbent article comprising an absorbent structure and superabsorbent particles wherein at least about 5% (by total weight of the superabsorbent particles) of the superabsorbent particles are flake superabsorbents and have an average surface area to volume ratio of at least about $0.05 \mu m^{-1}$. Since Everett, et al. fail to disclose each and every limitation of claim 1, claim 1 is novel over Everett, et al.

Furthermore, even if Everett, et al. did disclose each and every element of claim 1 (which applicants maintain it clearly does not), the rejection of claim 1 over Everett, et al. still could not be maintained because Everett, et al. do not provide an enabling disclosure for obtaining an absorbent article comprising an absorbent structure and superabsorbent particles, wherein at least about 5% (by total weight of the superabsorbent particles) of the superabsorbent particles are flake superabsorbents and have an average surface area to volume ratio of at least about 0.05 μm^{-1}. Everett, et al. simply make a general broad statement that superabsorbent particles having a flake shape may also be used therein. The Federal Circuit has stated that "even if the claimed invention is disclosed in a printed publication, that disclosure will not suffice as prior art if it was not enabling." *In re Donohue*, 766 F.2d 531, 533 (Fed. Cir. 1985), citing *In re Borst*, 345 F.2d 851, 855, 145 USPQ 554, 557 (CCPA 1965).[4] While it is true that anticipation does not require the teaching in the prior reference to be in the exact words of the claimed subject matter, it does require sufficient enabling disclosure with respect to the entirety of the claimed invention; that is, in this present case there must be an enabling disclosure of how to obtain flake superabsorbents that have an average surface area to volume ratio of at least about 0.05 μm^{-1}. This is lacking in Everett, et al., as Everett, et al. provides no disclosure as to how to obtain a flake superabsorbent that has an average surface area to volume ratio of at least about 0.05 μm^{-1}. Claim 1 is thus patentable over Everett, et al. for this additional reason.

Claims 8-10 and 12-14 depend from claim 1 and are therefore patentable for the same reasons as set forth above for claim 1, as well as for the additional elements they require.

5. Rejection of the Claims under 35 U.S.C. §103(a)

Reconsideration is requested of the rejection of claims 2-7, 11, and 15-25 under 35 U.S.C. §103(a) as unpatentable over Everett, et al. (U.S. Patent No. 6,437,214).

Claims 2-7 and 11 depend from claim 1. Since claim 1 is patentable under 35 U.S.C. §103(a) over Everett, et al., claims 2-7 and 11, which depend from claim 1 are also patentable over the cited reference.

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[4] *See also* MPEP §2121.01, which states "[t]he disclosure in an assertedly anticipating reference must provide an enabling disclosure of the desired subject matter; mere naming or description of the subject matter is insufficient, if it cannot be produced without undue experimentation." (citing *Elan Pharm., Inc. v. Mayo Found. For Med. Edu. & Research*, 346 F.3d 1051, 1054, 68 USPQ2d 1373, 1376 9 (Fed. Cir. 2003)).

Amended claim 15 is directed to a feminine napkin comprising an absorbent structure and superabsorbent particles wherein at least about 5% (by total weight of the superabsorbent particles) of the superabsorbent particles are flake superabsorbents and have an average surface area to volume ratio of at least about 0.05 μm^{-1} and a thickness of no more than about 40 micrometers.

Amended claim 24 is directed to a method for absorbing blood or menses. The method comprises contacting the blood or menses with an absorbent article comprising superabsorbent particles wherein at least about 5% (by total weight of the superabsorbent particles) of the superabsorbent particles are flake superabsorbents and have an average surface area to volume ratio of at least about 0.05 μm^{-1} and a thickness of no more than about 30 micrometers.

As stated in MPEP §2143, in order for the Office to show a *prima facie* case of obviousness, the Office must meet three criteria: (1) the prior art reference(s) must teach or suggest all of the claim limitations; (2) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings; and (3) there must be some reasonable expectation of success. Applicants assert that the Office has not, and cannot, meet the burden of number (1) and/or (2) above, which requires the Office to show the reference teaches or suggests all of the claim limitations of the instant invention and that there is some suggestion or motivation to modify the reference teachings.

At the outset, applicants respectfully submit that the entire premise for the rejection of claims 2-7, 11, and 15-25 under 35 U.S.C. §103(a) over Everett, et al. is predicated on an erroneous presumption that Everett, et al. disclose absorbent articles comprising the same type of superabsorbent particles in the same amounts as claimed in claims 2-7, 11, and 15-25 of the present invention. This is simply not the case. Independent claim 1 (from which claims 2-7 and 11 depend)), independent claim 15, and independent claim 24 all require that at least about 5% (by total weight of the superabsorbent particles) of the superabsorbent particles mentioned therein be flake superabsorbents and have an average surface area to volume ratio of at least about 0.05 μm^{-1}. As discussed above, although Everett, et al. do state that the superabsorbent particles used in their absorbent products may have a flake shape, there is simply no disclosure in Everett, et al. that at least about 5% (by total weight of the superabsorbent particles) of the superabsorbent particles in the absorbent articles of Everett, et al. are flake superabsorbents. The passages in Everett, et al. (including those passages cited by the Office) that list amounts of superabsorbent particles are merely describing the amount of superabsorbent particles that may be present in various absorbent layers of Everett's absorbent product, and are not referring to the amount of superabsorbent particles that are flake superabsorbents.[5] Nor do Everett, et al. disclose that the flake shaped superabsorbent particles mentioned therein have a surface area to volume ratio of at least about 0.05 μm^{-1}.[6] Thus, the superabsorbent particles described in Everett, et al. cannot be said to be the same as claimed in claims 1, 15, and 24.

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[5] *See, supra* n.3.

[6] With regard to claims 5-7, 15, 19-21, 24, and 27-28, the Office has stated that since Everett, et al. disclose superabsorbent particles identical to those claimed, it can be assumed that the superabsorbent particles of Everett, et al. would yield an identical thickness. Applicants submit that this assumption is incorrect since, for the reasons discussed herein, the flake shaped superabsorbent particles mentioned in Everett, et al. cannot be said to be identical to the flake superabsorbents of the present invention.

Consequently, Everett, et al. fail to teach or suggest all of the limitations of claims 2-7, 11, and 15-25.

Nor is there any motivation to modify the teachings of Everett, et al. to arrive at an absorbent article (or feminine napkin) comprising superabsorbent particles wherein at least about 5% (by total weight of the superabsorbent particles) of the superabsorbent particles are flake superabsorbents and have an average surface area to volume ratio of at least about 0.05 μm^{-1}. Everett, et al. merely list flake shaped superabsorbent particles as one of eight different shapes their superabsorbent particles may have. There is nothing in Everett, et al. to suggest that using flake shaped superabsorbent particles would provide any particular advantage over any of the other shapes listed in Everett, et al. As such, why would one skilled in the art be motivated to produce an absorbent article comprising superabsorbent particles wherein at least about 5% (by total weight of the superabsorbent particles) of the superabsorbent particles are flake superabsorbents? One skilled in the art would not be so motivated as there is simply nothing in Everett, et al. to suggest that at least about 5% (by total weight of the superabsorbent particles) of the superabsorbent particles should be flake shaped.

Nor is there any motivation in Everett, et al. to use superabsorbent particles having an average surface area to volume ratio of at least about 0.05 μm^{-1}, as required by claims 1, 15, and 24. As discussed in the specification of the present invention, the intake speed and capacity of absorbent articles is improved by using flake superabsorbent particles that have a high average surface area to volume ratio. However, there is nothing in Everett, et al. to suggest that using superabsorbent particles having a high surface area to volume ratio would be advantageous. In fact, if anything, Everett, et al. teach away from using superabsorbent particles having a high average surface area to volume ratio. For instance, Everett, et al. state that controlled rate superabsorbent particles may be used in the absorbent articles described therein, and that "controlled-rate superabsorbent can be configured with relatively large particle sizes to provide particles having a low, surface area to volume ratio which thereby produces the desired absorbency rate." *See* Everett, et al., col. 18, ln. 65 to col. 19, ln. 1 (emphasis added). There is thus nothing in Everett, et al. to motivate one skilled in the art to use flake superabsorbents that have an average surface area to volume ratio of at least about $0.05\mu m^{-1}$.

In light of the forgoing discussion, applicants submit that independent claims 1, 15, and 24 are patentable over Everett, et al. Claims 2-7 and 11 depend from claim 1, claims 16-23 depend from claim 15, and claims 23-29 depend from claim 24. These claims are patentable for the same reasons as set forth above for claims 1, 15, and 24, as well as for the additional elements they require.

CONCLUSION

In light of the foregoing, applicants request reconsideration of the rejection of claims 1-29 and the objection to claim 15, and allowance of all claims. The Commissioner is hereby authorized to charge any government fees which may be required to Deposit Account No. 19-1345.

Respectfully submitted,

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